

REMARKS

This Amendment is in response to the Office Action dated August 22, 2005 in which claims 1, 8-9, 11, 18 and 19 were initially rejected and claims 2-7 and 11-17 were indicated as being allowable if rewritten in independent form. Applicants would like to thank the Examiner for the indicated allowability of the subject matter recited in claims 2-7 and 12-17 and respectfully request reconsideration and allowance of the remaining claims in view of the above-amendments and the following remarks.

I. DRAWINGS

The drawings were objected to since element 315 in FIG. 3 was not mentioned in the specification. With this Amendment, various reference numerals appearing on page 9 of the specification are amended to more accurately reflect the reference numerals used in FIG. 3. These Amendments correct obvious typographical errors.

In addition, the specification is amended on page 9 to make specific reference to step 310 and is amended to correct a spelling error on page 8.

With these Amendments, Applicants respectfully request that the objection to the drawings be withdrawn.

II. CLAIM REJECTIONS UNDER §102

Claim 10 was rejected under §102(b) as being anticipated by Ohzeki et al., U.S. Patent No. 6,084,733.

With this Amendment, claim 10 is amended to remove reference to "one or more read/write heads." These elements are added to dependent claims 12 and 13.

Independent claim 10 is directed to a data storage device comprising a memory having stored therein one or more "host programmable tests" that are "overwritten onto vendor specific portions" of a self-monitoring program.

Contrary to paragraph 4 of the Office Action, Ohzeki does not anticipate "one or more host programmable tests" and does not anticipate such tests being "overwritten onto vendor specific portions" of a self-monitoring program.

Ohzeki discloses a disc drive unit having an error recovery procedure (ERP), which executes error recovery routines in a particular order depending on the error types. (Column 2, lines 41-57 and column 5, lines 23-25 and 40-41). As mentioned in column 5, lines 23-25, the offset that determines which error recovery routines are preformed is changed by the hard-disc controller according to the error types discriminated by the hard-disc controller.

This offset is not host-programmable. Rather, it is the hard-disc controller that discriminates the error types and changes the offset.

Further, Ohzeki et al. do not disclose any host programmable tests that are "overwritten onto vendor specific portions of a self-monitoring program."

Accordingly, Applicants respectfully request that the rejection of claim 10 under §102(b) based on Ohzeki et al. be withdrawn.

III. CLAIM REJECTIONS UNDER §103

A. Claims 1 and 11

Claims 1 and 11 were rejected as being unpatentable over Ohzeki in view of Rothberg, U.S. Patent No. 6,895,500.

1. Claim 1

Independent claim 1 is amended to define that the one or more host programmable tests comprises at least one test of the group consisting of a PES test, a head error rate test, a read verify reserve data track test, a clear log test, an erase drive test and a rewrite test.

Embodiments of these tests are recited in more detail in dependent claims 2-7, which were indicated as being allowable

if rewritten in independent form. Thus, the group of tests recited in independent claim 1 is believed to be patentable within the context of claim 1.

2. Claim 11

Claim 11 depends from independent claim 10 and further defines that the self-monitoring program recited in claim 10 is a Self-Monitoring, Analysis, and Reporting Technology (SMART) Program. Thus, within the context of claim 10, the memory has stored therein one or more host programmable tests "overwritten onto vendor specific portions of" the SMART program.

The Examiner is correct that Rothberg discloses a SMART program. However, Rothberg does not disclose one or more host programmable tests that are "overwritten onto vendor specific portions" of the SMART program. Rather, Rothberg discloses the use of SMART commands to enable SMART diagnostics, read diagnostic data and transmit setup data to the disc drive. For example, the smart command can include setup data for modifying the configuration parameters of the drive. (Abstract). Examples of configuration parameters are listed in column 1, lines 15-23. (See also, column 4, lines 51-60, column 5, lines 10-14, column 6, lines 10-14 and column 9, line 9 to column 10, line 13).

Since Rothberg do not disclose one or more host programmable tests overwritten onto vendor specific portions of a SMART program, as recited in dependent claim 11, Applicants respectfully request that the rejection of claim 11 under §103(a) be withdrawn.

B. Claims 8-9

Claims 8-9 were rejected under §103(a) as being unpatentable over Ohzeki and Rothberg in view of Lenny et al., U.S. Patent No. 6,600,614.

The Office Action acknowledges that Ohzeki and Rothberg fail to teach executing one or more host programmable tests on a data storage device in a "captive mode" as recited in claim 8.

As described in the specification on page 9, lines 9-11, the captive mode is a mode in which the host-initiated commands are ignored.

The Office Action suggests Lenny et al. discloses a captive mode in column 9, lines 28-30. However, Lenny et al. discloses only an "on-line" data collection mode and an "off-line" data collection mode. As described in column 9, lines 36-42, the off-line data collection mode ends and the on-line data collection mode starts whenever a command is issued by a host computer 140 to a disc drive 100 during the off-line data collection mode. In other words, the firmware simply continues to collect data as it receives commands from the host computer.

Lenny et al. does not disclose executing one or more host programmable tests in a "captive mode" in which the host-initiated commands are ignored.

In addition, claims 8-9 depend from independent claim 1, and Lenny et al. do not teach or suggest the elements of amended claim 1.

Applicants therefore respectfully request that the rejection of claims 8-9 be withdrawn.

C. Claims 18-19

Claims 18-19 were rejected under §103(a) as being unpatentable over Ohzeki in view of Lenny et al.

As discussed above with respect to claim 8, Lenny do not disclose one or more programmable tests executable in a captive mode, as recited in claim 18.

In addition, claims 18 and 19 depend from independent claim 10, which includes elements not disclosed by either Ohzeki et al. or Lenny et al., as discussed above. Therefore, Applicants respectfully request that the rejection of claims 18 and 19 under §103(a) be withdrawn.

IV. NEW CLAIM 20

New claim 20 is a combination of original independent claim 1 and dependent claim 8. New claim 20 includes the step of executing one or more post programmable tests on the data storage device in a captive mode in which host-initiated commands are ignored.

Accordingly, new claim 20 is believed to be allowable over the cited references. Consideration and allowance of new claim are respectfully requested.

The Director is authorized to charge any fee deficiency required by this paper or credit any overpayment to Deposit Account No. 23-1123.

Respectfully submitted,

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